RESOLUTION NO. 1599

A RESOLUTION OF THE MAYOR AND COUNCIL OF THE TOWN OF CLARKDALE, ARIZONA DECLARING AS A PUBLIC RECORD THAT CERTAIN DOCUMENT FILED WITH THE TOWN CLERK AND ENTITLED "ZONING CODE CHAPTER 9 - LANDSCAPE DESIGN STANDARDS".

BE IT RESOLVED by the Mayor and the Town Council of the Town of Clarkdale:

THAT the certain document entitled the "Zoning Code Chapter 9 – Landscape Design Standards", attached hereto as "Exhibit A", one paper copy and one electronic copy which are on file in the Office of the Town Clerk, is hereby declared to be a public record, and said copies are ordered to remain on file with the Town Clerk.

PASSED AND ADOPTED by the Mayor and Council of the Town of Clarkdale, Arizona this 9th day of April 2019.

Mayor Doug Von Gausig

ATTEST

Mary Ellen Dunn Town Clerk

Exhibit A

LANDSCAPE DESIGN STANDARDS

Replacing Zoning Code Chapter 9 – Landscape Design Standards

Adopted: April 9, 2019

Effective Date: May 10, 2019

CHAPTER 9

LANDSCAPE DESIGN STANDARDS

Articles:

9-010	Intent
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Section 9-010 Intent

The Town of Clarkdale encourages an integrated approach to landscape design. The following standards provide direction towards the production of a viable, attractive landscape design developed in consideration of the existing environment and climatic challenges of our unique area.

Principles of Landscape Design Standards:

- Preserve and enhance the natural beauty and environment
- Mitigate the impacts of parking and other vehicular areas
- Ensure safety
- Minimize the effects of temperature extremes, noise, pollution, wind and glare
- Promote water and energy conservation
- Provide a buffer between land uses
- Soften and complement new and existing structures
- Enhance quality of life

Landscaping may include a mix of vegetation (trees, shrubs and decorative accent plants) and surface treatments such as permeable surfaces, boulders and hardscape.

Section 9-020 Applicability

Landscaping is required for all new buildings and uses of land, redevelopment of buildings and land, except for single-family residences or accessory structures for residential use.

This ordinance may be applied, in whole or part, to Planned Area Development projects.

Per Section 11.20.A.1 of the Zoning Code, a landscape plan shall be provided for all projects subject to design review requirements.

Alterations to existing multi-family, commercial and industrial sites and buildings will require a review regarding compliance with this code. If there are deficiencies, staff will work with the applicant to bring properties into compliance.

Section 9-030 Basic Requirements

- 1. Surface areas of a project not used for buildings, drives, parking or permitted outside uses shall be landscaped, retained in its natural state or re-vegetated.
- 2. Any portions of a site disturbed by site preparation and/or construction, especially cut or fill slopes, shall be landscaped or re-vegetated.
- 3. Landscape areas may include organic and inorganic materials as approved by the Design Review Board and/or Community Development Director.
- 4. All healthy, mature native or adaptive trees on site not within the area to be disturbed for construction shall be preserved.
- 5. Preservation and re-use of viable native vegetation existing on the site is strongly encouraged. Credit towards the minimum landscape percentage in Section 9-100 is given for preserved landscaping.
- 6. Trees and shrubs to be preserved on site shall be protected during construction.
- 7. New plantings shall be selected from the approved plant list. Up to fifteen percent (calculated from total number of plants) of plantings may be from outside the list if they meet the following criteria:
 - a. Low to moderate water use
 - b. Hardy in zone 8b¹
 - c. Not defined as an invasive plant by Arizona Game and Fish Department

¹ Per the Arizona USDA Hardiness Zone Map

- 8. All plantings, including selections from the approved plant list, shall be determined to be appropriate for the location of the project under review.
- 9. No one species of plant shall provide more than fifty (50) percent of the quantity of additional plants required.
- 10. Landscaping of public rights of way is required. Right-of-way landscaping shall apply to the minimum landscaping percentage required in Section 9-100 and shall be subject to the maintenance requirements of Section 9-060. An encroachment or work in the right-of-way permit from the appropriate public entity is required.
- 11. Landscape design shall respect and reflect the existing palette of local flora and fauna.
- 12. Landscape shall be suitable to the terrain.
- 13. All landscaping, irrigation and other site work shall be installed as shown on the approved landscape and irrigation plans.
- 14. Landscaping shall be installed prior to issuance of a Certificate of Occupancy or receiving a final inspection from the Town of Clarkdale or the owner shall provide the Town with financial assurances, or other legal instrument acceptable to the Community Development Director, in sufficient amount, as evidenced by a written estimate from a licensed landscape architect or contractor to complete one-hundred (100%) percent of the landscaping with a date certain by when the landscaping will be completed.

Refer to Section 3-130 of the Zoning Code for landscape requirements for properties within the 89A Corridor Commercial Overlay District.

Section 9-040 Sustainable Design

Sustainable design concepts such as the following are desirable and should be incorporated into the landscape plan as much as possible:

- Good soil preparation
- Use of mulch
- Use of sunken tree basins
- Use of low water-use drought tolerant plants
- Use of efficient irrigation design
- Incorporation of passive water harvesting concepts
- Planting of symbiotic groupings of native species
- Incorporation of shade over public areas such as sidewalks, bikeways and parking lots
- Use of shade to mitigate the impact of sun and wind on structures and public

areas.

In addition, projects are urged to consider implementing active water harvesting and storage as an offset to groundwater pumping. General design information and site specific design guidelines are available from the Community Development Department at the Town.

Section 9-050 Buffering

- 1. Buffering is required between non-residential uses adjacent to existing or projected residential uses, and between multi-family or alternative living facilities and existing or projected single family uses.
- The buffering may consist of landscape screening, solid walls, or any combination thereof to physically and visually separate uses and mitigate impacts of noise, light or other nuisances.

Section 9-060 Irrigation and Maintenance

- 1. An irrigation system plan shall be submitted as part of a building permit. The plan shall incorporate WaterSense (an EPA program) best management practices, such as including a weather based irrigation controller with rain sensors and automatic shut-off valves during rain events. The plan shall also include an estimated shut-off date after the landscaping has been established to be inscribed in the irrigation system control panel.
- The developer and subsequent owners shall be responsible for maintaining the landscaping as shown on the approved plan. Maintenance shall include regular irrigation, weeding, fertilizing and pruning. This includes landscaping in a public rightof-way.
- 3. Dead plants shall be replaced within one hundred eighty (180) days of discovery or by the next planting season during the two year period after issuance of a Certificate of Occupancy or Final Approval of a project,
- 4. Areas left in their natural state must be monitored on a regular basis and any trash and debris removed immediately.

Section 9-070 Minimum Plant Size

1. Trees shall be a minimum of a 15 gallon size and/or three feet minimum in height and roots shall be in healthy condition. Deciduous trees used to fulfill screening requirements shall be a minimum of six feet in height. Evergreen trees used to fulfill screening requirements shall be a minimum of four feet in height.

Section 9-080 Restricted Planting Areas

1. Site Distance Triangles

- a. At the intersection of two (2) streets, or at the intersection of a street and an alley, a triangle measuring thirty (30) feet in length along the curb lines or edge of roadway or alley from the point of intersections shall be left unobstructed.
- b. At the intersection of a street and a driveway a triangle measuring twenty (20) feet along the curb line or roadway edge and the edge of the driveway from the point of intersection, and connecting diagonally, shall be left unobstructed.
- c. Specific visibility triangle requirements for the intersections shall be determined through application of the Manual on Uniform Traffic Control Devices Standards or by the Town Engineer.
- d. Landscape materials shall not exceed a height of thirty-six (36) inches above the grade of the roadway or driveway within the site distance triangle.
- e. Trees in the site distance triangle shall have a minimum eight (8) feet of clearance between the lowest limbs of the tree and the roadway.

Section 9-090 Parking Areas

- 1. Parking lot landscaping shall be included as part of the overall Landscape Design.
- 2. An area or combination of areas equal to ten (10%) percent of the total parking lot area shall be landscaped.
- 3. All islands in parking areas shall include vegetation. Trees in islands shall have a minimum eight (8) feet of clearance from the ground to the canopy.
- 4. A landscape buffer is required around the perimeter of any parking area adjacent to the street or a residentially zoned property.

Section 9-100 Minimum Landscaping as a Percentage of Lot Area for New Construction

- 1. Multi-family projects
 - a. Thirty (30) percent of the total lot size shall be landscaped.
 - b. A minimum fifteen (15) foot wide strip of land area adjacent to the street right-of-way shall be landscaped.
- 2. Commercial projects

- a. Thirty (30) percent of total lot size shall be landscaped.
- b. A minimum fifteen (15) foot wide strip of land area adjacent to the street right-of-way shall be landscaped.
- c. Properties within the 89A Corridor Commercial Overlay District are subject to the landscape requirements listed in Section 3-130.

3. Industrial projects

a. Fifteen (15) percent of total lot size or a minimum fifteen (15) foot wide strip of land adjacent to the street right-of-way shall be landscaped as determined during application review with staff and during review by the Design Review Board.

Section 9-110 Compliance regulations

- 1. The Town reserves the right to conduct compliance inspections.
- 2. All landscaping, irrigation and other site work shall be installed as shown on the approved landscape and irrigation plans.
- 3. Replacement of dead materials is required within one hundred eighty (180) days of discovery or by the next planting season.
- 4. Regular maintenance of all landscape areas is required. Failure to properly maintain the property is subject to the penalties outlined in Section 13-030 of the Zoning Code.

Section 9-120 Director Discretion

The Community Development Director may recommend a waiver or modification to the Landscape Design Code that supports sustainable development prior to the application moving forward to the Design Review Board. The Design Review Board may accept, reject or modify the Director's recommendation.

Modifications to an approved landscape design plan determined to be minor may be allowed by the Community Development Director.

The Community Development Director has the discretion to waive the application of this ordinance upon a finding that application of the requirements would reduce the fair market value of the property.

Section 9-130 Approved Plant List

Native Shrubs & Bushes

Common Name	Size	Water	Notes
(Botanical name)		demand	
Barberry (Algerita)	3-10'	Low	
(Berberis haematocarpa)			
Catclaw Acacia	4-10'	Very low	Common shrub or small tree
(Senegalia gregii)			
Beargrass	4-6'	Very low	Agave family, high stalks, high slopes
(Nolina microcarpa)			
Cliffrose	3-6'	Very low	Dry, rocky steep slopes
(Purshia subintegra)			
Creosote Bush	4-8'	Very low	Roots emit repellents
(Larrea tridentata)			
Feather Dalea	1-2'	Very low	Dry, rocky slopes
(Dalea Formosa)			
Graythorn	6-10'	Very low	Riparian edge, grasslands, bird habitat
(Ziziphus obtusifolia)			
Manzanita (Pointleaf)	4-6'	Very low	Dry hillsides above 4,000'
(Arctostaphylus pungens)			
Mesquite (Velvet)	10-	Low	Washes, riparian edges below 4,000'
(Prosopis velutina)	25'		
Mountain Mahogany	15'	Very low	High slopes
(Cercocarpus montanus)			
Mormon Tea	2-6'	Very low	Dry soil
(Ephedra viridis)			
Ocotillo	8-15'	Very low	Steep hillsides, needs drainage
(Fouquieria splendens)			
Shrub Live Oak (Scrub)	6-10'	Very low	High slopes, dry washes
(Quercus turbinella)			
Four-wing Salt Bush	4-6'	Very low	Common wildlife habitat
(Atriplex canescens)			
Broom Snakeweed	2-4'	Very low	Common. Over-grazed areas
(Gutierrezia sarothrae)			
Sugar Sumac	2-15'	Very low	Part shade, dry slopes
(Rhus avata)			
Winter Fat	2-3'	Very low	Open rangeland
(Krascheninnikovia)			

Adaptive Shrubs & Bushes

Common Name	Size	Water	Notes
(Botanical name)	D.E.C	demand	1,000
Angel's Hair	2"	Very low	Fine silver leaves
(Artemesia schmidtiana)	_	V 615 10 W	222 222 223 223
Arizona Rosewood	8'	Low	Evergreen
(Vauquelinia californica)		when est.	
Australian Laurel	6-	Low	
(Pittosporum tobira)	15'		
Autumn Sage	2x2'	Low-mod	Water demand is dependent on sun exposure
(Salvia gregii)			1
Bird of Paradise Bush	4-6'	Low	Tree variant, 12' - aka <u>Caesalpinia gilliesii</u>
(Erythrostemon gilliesii)			
Butterfly (Fountain) Bush	8-	Low	Long flower clusters
(Buddleja alternifolia)	12'		
Cotoneaster, Spreading	5-6'	Low	Hardy deciduous – aka Cotoneaster divaricatus
(Cotoneaster)			•
Damianita	2x2'	Very low	Evergreen, yellow flowers spring & fall
(Chrysactinia Mexicana)			
Dusty Miller	2-3'	Low	Evergreen shrub
(Artemesia stelleriana)			
Flame Honeysuckle	3-4'	Low	Deciduous, orange/red flowers late summer/fall
(Anisicanthus quadrifidus)			
Heavenly Bamboo	6-8'	Low	Some water, shade
(Nandina domestica)			
Juniper (Chinese)	2-	Very low	Evergreen
(Juniperus chinensis)	15'		
Juniper (Savin)	2-4'	Very low	Evergreen
(Juniperus sabina)			
Photinia (Chinese)	6-	Low	Water to establish
(Photinia serrulata)	12'		
Pyracantha (Firethorn)	6-	Low	Trains to fence
(Pyracantha coccinea)	12'		
Rosemary	2-6'	Very low	Needs drainage
(Rosemarinus officinalis)	1		
Santolina	1-2"	Very low	Evergreen, good ground cover
(Santolina virens)			
Texas Sage	3-8'	Very low	Semi-evergreen, many variations
(Leucophyllum frutescens)			11 01 1 01
Turpentine Bush	2-3'	Very	Evergreen, yellow flowers in fall
(Ericameria Laricifolia)	1	Low	D 11
Viburnum, (various)	4-	Low-mod	Deciduous, partial sun
(Viburnum lantana)	12'	T	TT 44 1
Xylosma	8-	Low	Heat tolerant
(Xylosma congestum)	10'		

Native Trees

Common Name	Size	Water	Notes
(Botanical name)		demand	
Arizona Ash (Velvet)	30-40'	Mod	Riparian, aggressive root
(Fraxinus velutina)			
Arizona Cypress	30-40'	Very low	Evergreen, dry soils
(Cupressus arizonica)			
Netleaf Hackberry	20-30'	Low	Riparian edge
(Celtis reticulara)			
Juniper (One-seed)	15-35'	Very low	Evergreen, dry mesas, hillsides
(Juniperus monosperma)			
Juniper (Utah)	15-30'	Very low	Evergreen, One main trunk, dry areas
(Juniperus osteosperma)			
Mesquite (Velvet)	10-25'	Low	Washes, riparian edges below 4,000'
(Prosopis velutina)			
Oak (Emory or Live)	20-50'	Low	Evergreen, lower slopes
(Quercus emoryi)			
Oak (Gambel)	20-50'	Low	Deciduous, typically above 5,000'
(Cuercus gambii)			
Oak (Sonoran)	6-10'	Very low	Deciduous, high slopes, dry washes. Aka Shrub
(Quercus turbinella)			Live Oak, others
Willow (Desert)	10-25'	Low-mod	Riparian edge, washes
(Chilopsis linearis)			
Willow (Goodding)	30-50'	Mod	Deciduous, riparian, invasive roots
(Salix Gooddingii)			
Willow (Globe)	20-30'	Mod	Deciduous
(Salix matsudana)			

Adaptive Trees

Common Name	Size	Water	Notes
(Botanical name)		demand	
Cedar (Deodar)	60-80°	Very low	Evergreen, check varieties
(Cedrus deodara)			
Chaste Tree	3-16'	Low-mod	Purple flower
(Vitex agnus-castus)			
Chinaberry	30-50'	Low	Grows in poor soil
(Melia azedarach)			
Crabapple (Flowering)	6-30'	Low-mod	Check available local varieties
(Malus)			
Honeylocust	35-70'	Low	Deciduous, good street trees
(Thornless)			
(Gleditsia Triacanthos)			
Little Leaf Ash	8-10'	Mod	Semi-evergreen, slow, prune to tree
(Fraxinus gregii)			
Locust (Idaho)	30-40'	Very low	Deciduous, Aggressive roots
(Robinia Idahoensis)			
Oak (Southern Live)	40'	Low	Deep rooted
(Quercus virginiana)			
Pine (Aleppo)	30-60'	Low	Evergreen, hardy to heat, aridity, wind
(Pinus halipensis)			
Pine (Pinion Nut)	10-35'	Very low	Evergreen, hardy in desert mountains
(Pinus edulis)			
Pine (Afghan)	30-50'	Low	Evergreen, now "Pinus brutia" – fast growing
(Pinus elderica)			
Plum (Flowering)	20-30'	Mod	Deciduous, requires maintenance
(Prunus varieties)			
Raywood Ash	60-	Mod	Fast growing
(Fraxinus angustifolia)	100'		

Cacti and Succulents

Common Name	Size	Water	Notes
(Botanical name)		demand	
Century Plant	3'	Very	Tall flower stalk
(Agave parryi)		low	
Cholla (Plateau)	2-4'	Very	Long, branching sections
(Cylindroptuntia whipplei)		low	
Claret Cup	1-2'	Very	Dense mounds of stems
(Echinocereus triglochidiatus)		low	
Fendler Hedgehog	6"-1'	Very	Small clumps, rocky
(Echinocereus fendleri)		low	
Prickly Pear (Desert)	2-5'	Very	Dry hillsides
(Optuntia phaeacantha)		low	
Tonto Basin Agave	2-3'	Very	Extremely rare plant. Flower spikes may reach
(Agave delamateri)		low	20 feet.
Yucca (Banana)	2-3'	Very	Dense flower clusters
(Yucca baccata)		low	
Yucca (Soaptree)	2-15'	Very	Tall single trunk
(Yucca elata)		low	

Recommended Decorative Plants

Common Name (Botanical name)	Water demand	Notes
Desert Marigold – Baileya multiradiata https://plants.usda.gov/core/p rofile?symbol=BAILE	Low	Biennial
Tufted Evening Primrose – Oenethera caespitosa https://en.wikipedia.org/wiki/Oenothera_caespitosa	Low	Perennial – Maximum height of 4 inches
Penstemon – variety of species https://en.wikipedia.org/wiki/ /Penstemon	Low	Perennial – may reach six feet in height Shades range from light pink to vivid red
Angelita Daisy – Hymenoxus acaulis https://en.wikipedia.org/wiki/Tetraneuris_acaulis	Low	
Blue flax – linium lewisii https://en.wikipedia.org/wiki /Linum_lewisii	Low	
Desert Globe Mallow – Sphaeralcea ambigua https://en.wikipedia.org/wiki/Sphaeralcea_ambigua	Low	
Blue Gamma Grass – Bouteloua gracilis https://en.wikipedia.org/wiki/Bouteloua_gracilis	Low	Limited maintenance
Desert Lavender – Hyptis emoryi https://en.wikipedia.org/wiki/Hyptis_emoryi	Low	Favored by honeybees